

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:Claim 1. (Currently Amended).

A process for producing a silicon single crystal, comprising pulling a silicon single crystal from a silicon melt which is contained in a crucible having a crucible wall and having a crucible diameter of at least 450 mm,

placing a heat shield above said crucible; and said silicon single crystal being pulled with a diameter of at least 200 mm; and

exposing the silicon melt to ~~an influence of a magnetic field consisting of~~ a traveling magnetic field which exerts a substantially vertically oriented force on the melt in a region of the crucible wall and

applying the magnetic field with an intensity which is sufficient to attenuate low-frequency temperature fluctuations in the melt.

~~except for said traveling magnetic field no further magnetic field being applied to the melt.~~

Claim 2. (Original).

The process as claimed in claim 1,  
wherein the silicon single crystal is pulled with an oxygen  
concentration of at least  $5 * 10^{17}$  atoms per  $\text{cm}^3$ .

Claims 3-13: (Canceled).Claim 14. (Currently Amended).

A process for producing a silicon single crystal, comprising  
pulling a silicon single crystal from a silicon melt which  
is contained in a crucible having a crucible wall and having a  
crucible diameter of at least 450 mm,

placing a heat shield above said crucible; and said silicon  
single crystal being pulled with a diameter of at least 200 mm;  
and

exposing the silicon melt to ~~an influence of~~ a magnetic  
field consisting of a traveling magnetic field which exerts a  
substantially vertically oriented force on the melt in a region  
of the crucible wall; and

applying the magnetic field with an intensity which is  
sufficient to attenuate low-frequency temperature fluctuations in  
the melt; and

~~generating the magnetic field is due to with three coils which are connected and connecting said three coils to a 3-phase power supply, and the traveling magnetic field which, in the region of the crucible wall, exerts a substantially vertically oriented force on the melt is generated by suitable selection of an order of connections; and the connections of the coils have with a phase angle in an order  $0^\circ - 60^\circ - 120^\circ$  or  $0^\circ - 120^\circ - 240^\circ$ .~~

~~except for said traveling magnetic field no further magnetic field being applied to the melt.~~

Claims 15-16: (Canceled).

Please add new claims 17 and 18:

Claim 17. (New): A process for producing a silicon single crystal, comprising pulling a silicon single crystal from a silicon melt which is contained in a crucible having a crucible wall and having a crucible diameter of at least 450 mm,

placing a heat shield above said crucible; and said silicon single crystal being pulled with a diameter of at least 200 mm; and

exposing the silicon melt to a magnetic field consisting of a traveling magnetic field which exerts a substantially

vertically upwardly oriented force on the melt in a region of the crucible wall, and

applying the magnetic field with an intensity which is sufficient to attenuate low-frequency temperature fluctuations in the melt.

Claim 18. (New): A process for producing a silicon single crystal, comprising pulling a silicon single crystal from a silicon melt which is contained in a crucible having a crucible wall and having a crucible diameter of at least 450 mm,

placing a heat shield above said crucible; and said silicon single crystal being pulled with a diameter of at least 200 mm; and

exposing the silicon melt to a magnetic field consisting of a traveling magnetic field which exerts a substantially vertically downwardly oriented force on the melt in a region of the crucible wall, and

applying the magnetic field with an intensity which is sufficient to attenuate low-frequency temperature fluctuations in the melt.